

slam down to its up position when boat 10 travels at a high rate of speed or through rough waters or swells. Rather, kicker motor 24 is maintained in an up position which prevents the generation of the stresses and forces associated with kicker motor 24 bouncing up and down and thus avoids damage to either mounting bracket of kicker motor 24 or to transom 26 of boat 10.

Outboard motor support device 50 is simple in construction and easy to install. Most importantly, it is easy and quick to use.

Although the present invention has been described with reference to preferred embodiments, workers skilled in the art will recognize that changes may be made in form and detail without departing from the spirit and scope of the invention. For example, the support could have a different configuration than a V-frame or be mounted to a different location on the motor or the boat. Additionally, the tie down strap could be secured to the tie down bracket with another means, or only one end of the strap could be secured to the tie down bracket with the belt passing through a ring located at the other end of the belt to create a loop within which the motor would be captured.

What is claimed is:

1. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

- a tie down bracket placed between a trim adjustment rack of the motor and the transom of the boat;
- a support rotatably mounted with respect to the motor such that when the motor is in an up position the support can rotate about its mounting point to contact and support the motor; and
- a tie down strap which passes behind the motor and is secured to the tie down bracket.

2. The device of claim 1, wherein the tie down bracket has a base plate which is secured adjacent to the transom by compression directed from the trim adjustment rack toward the transom and a pair of tabs that extend perpendicular to the base plate with the pair of tabs each having a hole.

3. The device of claim 1, wherein the tie down strap is adjustable in length and has a pair of ends that are secured to the tie down bracket on opposite sides of the motor.

4. The tie down strap of claim 3, wherein a hook is secured at each end of the tie down strap for securing the tie down strap to the tie down bracket through the holes on the pair of tabs.

5. The device of claim 1, wherein the support has a cradle which receives and secures the drive shaft housing of the motor.

6. The device of claim 5, wherein the support comprises a V-frame with a cross bar such that the opening of the V-frame mounts to the trim adjustment rack of the motor.

7. The device of claim 6, wherein the cross bar extends beyond the V-frame to form a pair of handles on either side of the V-frame.

8. The device of claim 1, wherein a lanyard is connected between the motor and the support to raise the support when the motor is raised to an up position.

9. The device of claim 1, wherein the support is rotatably mounted such that the support is positioned between the motor and the transom when the motor is in a down position.

10. The device of claim 9, and further including:

means connected between the support and the motor for rotating the support upward when the motor is tilted from the down position to the up position.

11. The device of claim 10, wherein the support includes a handle.

12. The device of claim 1, wherein the tie down bracket has a base plate which is mounted to the transom by bolts which mount the motor to the transom by passing through the trim adjustment rack of the motor and the base plate of the tie down bracket, the tie down bracket also including a pair of tabs that extend perpendicular to the base plate with the pair of tabs each having a hole.

13. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

a tie down bracket having a base which is secured to the transom and a first and a second tab which extend from the base oppositely facing each other, wherein the first and the second tabs each have a hole;

a support formed in a V-frame having a cross bar and a cradle, wherein the opening of the V-frame is mounted in relation to the motor such that when the motor is in an up position the support can rotate about its mounting point and the cradle located at the apex of the V-frame receives and supports the motor along the drive shaft housing of the motor; and

a tie down strap of adjustable length having a pair of hooks secured to its ends, wherein one of the hooks is secured in each one of the holes in the tabs and the tie down strap passes behind the drive shaft housing of the motor.

14. The device of claim 13, wherein the cross bar extends beyond the V-frame to form a pair of handles for the support on either side of the V-frame.

15. The device of claim 14, wherein the tie down strap passes beneath the handles of the support.

16. The device of claim 13, wherein a lanyard cable is connected between the motor and the support to raise the support when the motor is tilted to an up position.

17. A method for securing a motor to a transom of a boat, the method comprising:

sliding a tie down bracket of an outboard motor support device between a transom of the boat and a trim adjustment rack of the motor;

mounting the motor to the transom of the boat which compresses and secures the tie down bracket between the trim adjustment rack of the motor and the transom of the boat;

tilting the motor to an up position;

rotating a support of the motor support device which has a frame pivotally mounted with respect to the motor and which has a cradle, such that the cradle receives and supports the motor along a drive shaft housing of the motor; and

securing a tie down strap of the motor support device to the tie down bracket such that the tie down strap passes behind the drive shaft housing of the motor and secures the motor in place between the cradle of the support and the tie down strap.

18. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

a tie down bracket;

a support having a V-frame with a cradle at its apex which is rotatably mounted with respect to the motor such that when the motor is in an up position the support can rotate about its mounting point to contact and support the motor in the cradle; and

a tie down strap which passes behind the motor and is secured to the tie down bracket.

19. The device of claim 18, wherein the tie down bracket has a base plate which is secured between the transom of the boat and a trim adjustment rack of the motor, the tie down bracket further including a pair of tabs that extend perpendicular to the base plate with the pair of tabs each having a hole.

20. The device of claim 18, wherein the tie down strap is adjustable in length and has a pair of ends that are secured to the tie down bracket on opposite sides of the motor.

21. The tie down strap of claim 20, wherein a hook is secured at each end of the tie down strap for securing the tie down strap to the tie down bracket.

22. The device of claim 18, wherein the cradle receives and secures the motor along a drive shaft housing of the motor.

23. The device of claim 22, wherein the V-frame opening of the support mounts to a trim adjustment rack of the motor.

24. The device of claim 22, wherein the V-frame has a cross bar which extends beyond the V-frame to form a pair of handles on either side of the V-frame.

25. The device of claim 18, wherein a lanyard is connected between the motor and the support to raise the support when the motor is raised to an up position.

26. The device of claim 18, wherein the support is rotatably mounted such that the support is positioned between the motor and the transom when the motor is in a down position and the axis of rotation for the support is along a plane parallel to the length of the boat.

27. The device of claim 26, and further including:
means connected between the support and the motor for rotating the support upward when the motor is tilted from the down position to the up position.

28. The device of claim 27 wherein the support includes a handle.

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CLAIM(S):

4. (Amended) The [tie down strap] device of claim 3, wherein a hook is secured at each end of the tie down strap for securing the tie down strap to the tie down bracket through the holes on the pair of tabs.

21. (Amended) The [tie down strap] device of claim 20, wherein a hook is secured at each end of the tie down strap for securing the tie down strap to the tie down bracket.

26. (Amended) The device of claim 18, wherein the support is rotatably mounted such that the support is positioned between the motor and the transom when the motor is in a down position and the [axis] plane of rotation for the support is along a plane parallel to the length of the boat.

--29. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

a tie down bracket;

a support rotatably mounted with respect to the motor such that
when the motor is in an up position the support can rotate
about its mounting point to contact and support the motor
and when the motor is in a down position the support is
positioned between the motor and the transom; and

a tie down element which passes behind the motor and is secured to
the tie down bracket when the motor is in the up position to
hold the motor in contact with the support.

30. The device of claim 29 wherein a hook is secured at each end of the
tie down strap for securing the tie down strap to the tie down bracket through holes
at opposite ends of the tie down bracket.

31. The device of claim 29 wherein the support has a cradle which receives and secures a drive shaft housing of the motor.

32. The device of claim 31 wherein the support has an first end and a second end, wherein the cradle is located at the first end, and wherein the support is rotatably mounted at its second end.

33. The device of claim 29, and further including:
means connected between the support and the motor for rotating the support upward when the motor is tilted from the down position to the up position.

34. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

a support having a cradle at a first end and having a second end rotatably mounted about a horizontal pivot axis which is generally parallel to the transom such that when the motor is in an up position the support can rotate about the pivot axis to contact and support the motor in the cradle and when the motor is in a down position the support is positioned between the motor and the transom; and

a flexible tie down element which passes behind the motor to hold the motor in contact with the cradle when the motor is in its up position.

35. The device of claim 34 wherein the cradle receives and secures the motor along a drive shaft housing of the motor.

36. The device of claim 34 wherein a lanyard is connected between the motor and the support to move the support to a position for contacting and supporting the motor when the motor is raised to an up position.

37. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

a tie down bracket having holes at opposite ends;

a support having a cradle at an a first end, wherein a second end of the support is mounted for pivotal movement such that when the motor is in an up position the support can rotate about its mounting point to a first position at which the cradle receives and supports the motor along a drive shaft housing of the motor and when the motor is in a down position the support is in second position between the motor and the transom; and

a tie down element having a pair of hooks secured to its ends, wherein each one of the hooks is secured in one of the holes in the tie down bracket and the tie down strap passes behind the drive shaft housing of the motor to hold the drive shaft housing in contact with the cradle when the motor is in the up position.

38. The device of claim 37 wherein a lanyard is connected between the motor and the support to pivot the support when the motor is tilted to an up position.

39. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

a support rotatably mounted at a first end and having a cradle at a second end, the support being rotatable such that when the motor is in an up position the support can rotate about its first end so that the cradle receives and supports the motor along a drive shaft housing of the motor and when the motor is in a down position the support is positioned between the motor and the transom; and

a tie down element which passes behind the motor for securing the drive shaft housing in place against the cradle when the motor is in an up position.

40. An outboard motor support device for securing an outboard motor to a transom of a boat, the device comprising:

a support rotatably mounted at a first end and having a cradle at a second end, the support being rotatable such that when the motor is in an up position the support can rotate about its first end so that the cradle receives and supports the motor along a drive shaft housing of the motor and when the motor is in a down position the support is positioned between the motor and the transom; and

means connected between the support and the motor for rotating the support upward when the motor is tilted from the down position to the up position. --